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**Sub-Slab Soil Gas Sampling Letter Report,
Roux Associates, 2004**

ROUX ASSOCIATES INC



25 CORPORATE DRIVE
SUITE 230

BURLINGTON, MASSACHUSETTS 01803 TEL: 781-270-6600 FAX: 781-270-9066

July 19, 2004

Mr. Gerald M. Rinaldi
Industri-Plex Site Remedial Trust
c/o Solutia Inc.
575 Marysville Centre Drive
St. Louis, Missouri 63141

Re: Sub-Slab Soil Gas Sampling
Industri-Plex Superfund Site
Woburn, Massachusetts

Dear Mr. Rinaldi:

This letter report presents the results of sub-slab soil gas sampling recently conducted by Roux Associates, Inc. (Roux Associates) at the Industri-Plex Superfund Site in Woburn, Massachusetts (Site). Collection of sub-slab soil gas samples was requested by the U.S. Environmental Protection Agency (USEPA) in a June 18, 2003 e-mail to the Industri-Plex Site Remedial Trust (ISRT), to facilitate assessment of potential current and future human health risks at the Site. Sampling was conducted at seven buildings located at or immediately adjacent to the Site at which indoor air could potentially be impacted by volatile organic compounds (VOCs) from underlying shallow groundwater, according to USEPA. The seven buildings at which sampling was conducted and the approximate sampling point locations are shown in the figure provided as Attachment 1.

Roux Associates collected soil gas samples from six of the seven buildings on May 14, 2004, while sampling at the seventh building (Teradyne) was performed on June 18, 2004. USEPA's contractor TetraTech NUS provided oversight of Roux Associates' sampling activities on both dates. Sampling was performed in accordance with USEPA's Industri-Plex Superfund Site Sub-Slab Sampling Guideline, dated November 3, 2003, as modified based on the ISRT's November 18, 2003 e-mail to USEPA providing comments on the USEPA sampling guideline and USEPA's November 26, 2003 e-mail response. (Copies of the sampling guideline and both e-mail transmissions, as well as USEPA's June 18, 2003 e-mail requesting the sub-slab soil gas samples, are provided in Attachment 2.) One notable modification to the USEPA sampling guideline was the collection of two exterior soil gas samples at the Sacco property located at 41 Atlantic Avenue, where sub-slab sampling was not permitted by the landowner due to the alleged presence of a moisture and/or vapor barrier beneath the building slab. Instead, the samples were collected outside the Sacco building, approximately four feet below land surface and as close as possible to the building's exterior walls. The other notable

modification involved the Teradyne building, where the following additional field quality assurance/quality control (QA/QC) measures were implemented at Teradyne's request:

- Use of permanent markers for labeling was prohibited;
- A "duplicate" sample and a trip blank were collected; and
- A sample of the modeling clay used to seal the annular space around the soil gas probe was submitted for laboratory analysis of VOCs.

The "duplicate" sample collected at the Teradyne building was not a split of a given sample volume; rather, it was a distinct sample collected immediately after the original sample using the same sampling apparatus, setup, and location. Given the inherent difficulties in precisely splitting soil gas samples, this approach is considered by Roux Associates to be a suitable alternative for evaluating field (i.e., sampling) precision, and was accepted as such by Teradyne.

All soil gas samples were submitted to Severn Trent Laboratories, Inc. (STL) in Colchester, Vermont for analysis of VOCs using USEPA Method TO-15. The sample of the modeling clay used to seal the annular space around the soil gas probe at the Teradyne building was also submitted to STL for analysis of VOCs, using USEPA Method 8260B.

Validated results of the soil gas analyses, including results for the QA/QC samples collected by Roux Associates, are summarized in the table provided as Attachment 3. Copies of the two "Sample Data Summary Packages" produced by STL are provided in Attachment 4. (STL's "Extended Data Packages," which include both summary forms and raw data, are not being provided as attachments to this report; however, copies can be provided under separate cover upon request.) In accordance with USEPA's November 2003 Industri-Plex Superfund Site Sub-Slab Sampling Guideline, the laboratory data underwent Tier III data validation, which was performed by Trillium Inc. (Trillium) of Knoxville, Tennessee, using USEPA Region I Data Validation Functional Guidelines for Evaluating Environmental Analysis (12/96). Trillium's validation reports for the two batches of soil gas samples are provided in Attachment 5.

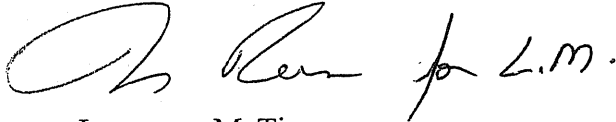
Laboratory analysis of the modeling clay used to seal the annular space around the soil gas probe at the Teradyne building demonstrated that the clay contains 1,1-dichloroethene, acrylonitrile, and 2-butanone (methyl ethyl ketone [MEK]), at concentrations of 260, 46, and approximately 14 micrograms per kilogram, respectively. 1,1-dichloroethene was not detected in any of the soil gas samples, while acrylonitrile was not reported in the soil gas results because it is not a TO-15 analyte. MEK was detected in both the clay and in several of the soil gas samples, including the two "duplicate" samples collected at the Teradyne building. However, the data validator did not qualify any of the detections of MEK in soil gas based solely on the presence of MEK in the clay. Laboratory forms for the modeling clay are included in one of the Sample

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Data Summary Packages provided in Attachment 4, and Trillium's validation report for the analysis of the modeling clay is provided in Attachment 5.

Sincerely,

ROUX ASSOCIATES, INC.

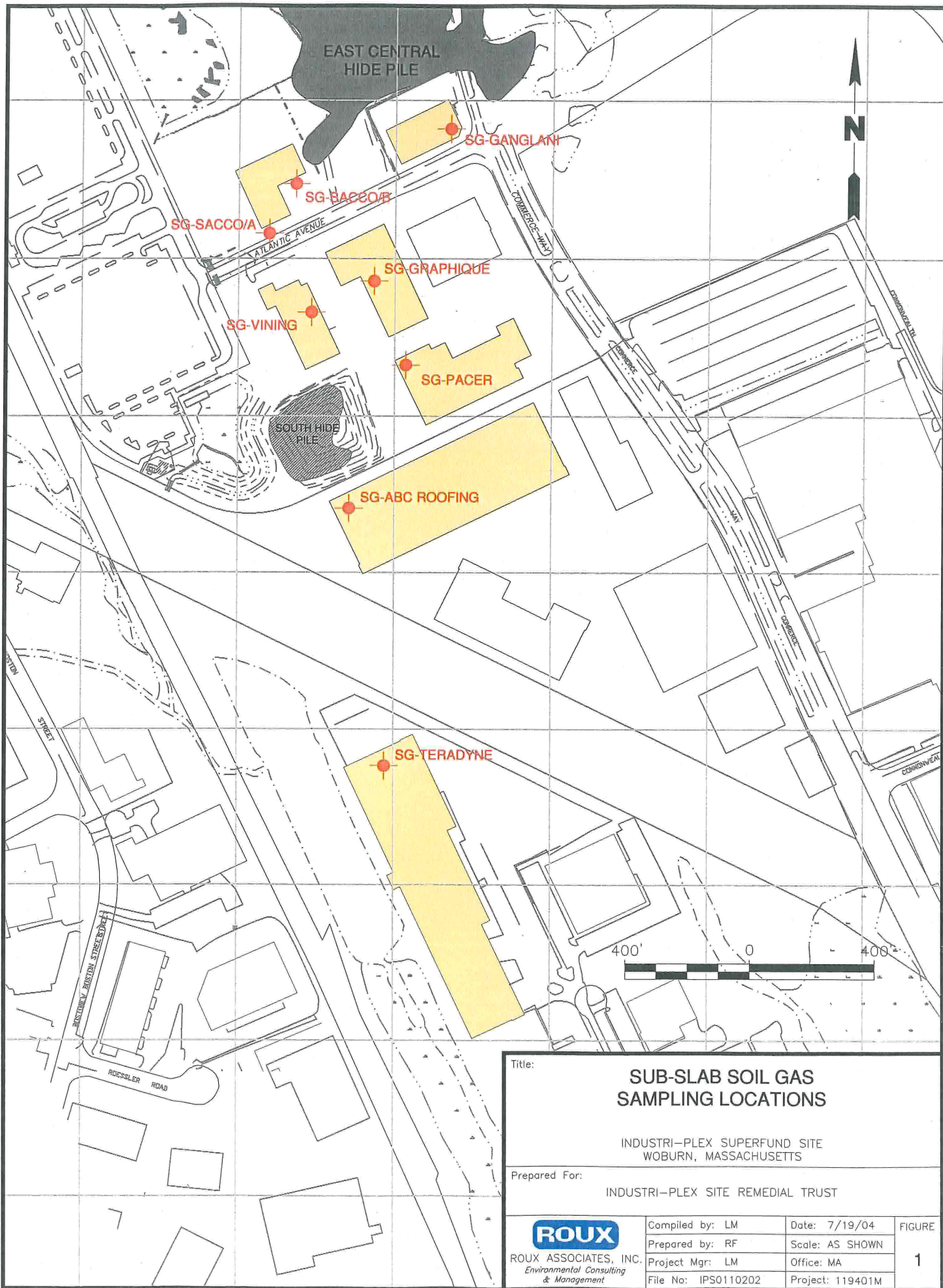
A handwritten signature in black ink, appearing to read "Lawrence McTiernan" followed by a stylized "for L.M.".

Lawrence McTiernan
Principal Hydrogeologist/Project Manager

Attachments

ATTACHMENT 1

Sub-Slab Soil Gas Sampling Locations Map



Title:

SUB-SLAB SOIL GAS SAMPLING LOCATIONS

INDUSTRI-PLEX SUPERFUND SITE
WOBURN, MASSACHUSETTS

Prepared For:

INDUSTRI-PLEX SITE REMEDIAL TRUST



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

Compiled by: LM

Prepared by: RF

Project Mgr: LM

File No: IPS0110202

Date: 7/19/04

Scale: AS SHOWN

Office: MA

Project: 119401M

FIGURE

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